STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/572, 348
Source: 1FWP
Date Processed by STIC: 02/08/2007

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER</u> <u>VERSION 4.4.0 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (http://www.uspto.gov/ebc/efs/downloads/documents.htm, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
- Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):
 U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street,
 Alexandria, VA 22314

Revised 01/10/06

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION SERIAL NUMBER: 10/572, 348
ATTN: NEW RULES CASES:	PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE
1Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.
3Misaligned Amino Numbering	The numbering under each 5 th amino acid is misaligned. Do not use tab codes between numbers; use space characters , instead.
4Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
5Variable Length	Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
7Skipped Sequences (OLD RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
8 Skipped Sequences (NEW RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000
9Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence. (see item 11 below)
11Use of <220>	Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown. Please explain source of genetic material in <220> to <223> section or use "chemically synthesized" as explanation. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32), also Sec. 1.823 of Sequence Rules
12PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
13 Misuse of n/Xaa	"n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid



IFWP

RAW SEQUENCE LISTING DATE: 02/08/2007 PATENT APPLICATION: US/10/572,348 TIME: 11:42:29

Input Set : A:\sequence listing.txt
Output Set: N:\CRF4\02082007\J572348.raw

```
3 <110> APPLICANT: Novo Nordisk A/S
      5 <120> TITLE OF INVENTION: Novel GLP-1 derivatives
      7 <130> FILE REFERENCE: 6692-WO
C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/572,348
C--> 9 <141> CURRENT FILING DATE: 2006-03-17
                                                                 Does Not Comply
                                                                 Corrected Diskette Needed
      9 <160> NUMBER OF SEQ ID NOS: 5
     11 <170> SOFTWARE: PatentIn version 3.1
     13 <210> SEQ ID NO: 1
     14 <211> LENGTH: 31
     15 <212> TYPE: PRT
     16 <213> ORGANISM: Homo sapiens
     18 <400> SEQUENCE: 1
     20 His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
                                             10
     24 Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arq Gly
     25
                    20
                                         25
                                                 gradiel Response. Artificient,
L 2137 Responses one species.
L'Unternaon or genus species.
     28 <210> SEQ ID NO: 2
     29 <211> LENGTH: 40
     30 <212> TYPE: PRT
     31 <213> ORGANISM: (Synthetic construct
     33 <220> FEATURE:
     34 <221> NAME/KEY: MISC FEATURE
     35 <222> LOCATION: (1)..(1)
     36 <223> OTHER INFORMATION: Xaa at position 1 is L-histidine, D-histidine, desamino-
histidine
     37
               , 2-amino-histidine, beta-hydroxy-histidine, homohistidine, N-alp
     38
              ha-acetyl-histidine, alpha-fluoromethyl-histidine, alpha-methyl-h
     39
              istidine, 3-pyridylalanine, 2-pyridylalanine, or 4-pyridylalanine
W - - > 40
     43 <220> FEATURE:
     44 <221> NAME/KEY: MISC FEATURE
     45 <222> LOCATION: (2)..(2)
     46 <223> OTHER INFORMATION: Xaa at position 2 is Ala, Gly, Val, Leu, Ile, Lys, Aib, (1-
aminoc
     47
              yclopropyl) carboxylic acid, (1-aminocyclobutyl) carboxylic acid,
     48
              (1-aminocyclopentyl) carboxylic acid, (1-aminocyclohexyl) carboxy
     49
              lic acid, (1-aminocycloheptyl) carboxylic acid or (1-aminocyclooc
₩--> 50
              tyl) carboxylic acid.
     53 <220> FEATURE:
     54 <221> NAME/KEY: MISC FEATURE
     55 <222> LOCATION: (10)..(10)
     56 <223> OTHER INFORMATION: Xaa at position 10 is Val or Leu.
     59 <220> FEATURE:
     60 <221> NAME/KEY: MISC FEATURE
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61, <222> LOCATION: (12)..(12)

RAW SEQUENCE LISTING DATE: 02/08/2007 PATENT APPLICATION: US/10/572,348 TIME: 11:42:29

Input Set : A:\sequence listing.txt
Output Set: N:\CRF4\02082007\J572348.raw

62 <223> OTHER INFORMATION: Xaa at position 12 is Ser, Lys or Arg. 65 <220> FEATURE: 66 <221> NAME/KEY: MISC FEATURE 67 <222> LOCATION: (13)..(13) 68 <223> OTHER INFORMATION: Xaa at position 13 is Tyr or Gln. 71 <220> FEATURE: 72 <221> NAME/KEY: MISC FEATURE 73 <222> LOCATION: (14)..(14) 74 <223> OTHER INFORMATION: Xaa at position 14 is Leu or Met. 77 <220> FEATURE: 78 <221> NAME/KEY: MISC FEATURE 79 <222> LOCATION: (16)..(16) 80 <223> OTHER INFORMATION: Xaa at position 16 is Gly, Glu or Aib. 83 <220> FEATURE: 84 <221> NAME/KEY: MISC FEATURE 85 <222> LOCATION: (17)..(17) 86 <223> OTHER INFORMATION: Xaa at position 17 is Gln, Glu, Lys or Arg. 89 <220> FEATURE: 90 <221> NAME/KEY: MISC FEATURE 91 <222> LOCATION: (19)..(19) 92 <223> OTHER INFORMATION: Xaa at position 19 is Ala or Val. 95 <220> FEATURE: 96 <221> NAME/KEY: MISC FEATURE 97 <222> LOCATION: (20)..(20) 98 <223> OTHER INFORMATION: Xaa at position 20 is Lys, Glu or Arg. 101 <220> FEATURE: 102 <221> NAME/KEY: MISC_FEATURE 103 <222> LOCATION: (21)..(21) 104 <223> OTHER INFORMATION: Xaa at position 21 is Glu or Leu. 107 <220> FEATURE: 108 <221> NAME/KEY: MISC FEATURE 109 <222> LOCATION: (24)..(24) 110 <223> OTHER INFORMATION: Xaa at position 24 is Ala, Glu or Arg. 113 <220> FEATURE: 114 <221> NAME/KEY: MISC FEATURE 115 <222> LOCATION: (27)..(27) 116 <223> OTHER INFORMATION: Xaa at position 27 is Val or Lys. 119 <220> FEATURE: 120 <221> NAME/KEY: MISC FEATURE 121 <222> LOCATION: (28)..(28) 122 <223> OTHER INFORMATION: Xaa at position 28 is Lys, Glu, Asn or Arg. 125 <220> FEATURE: 126 <221> NAME/KEY: MISC FEATURE 127 <222> LOCATION: (29)..(29) 128 <223> OTHER INFORMATION: Xaa at position 29 is Gly or Aib. 131 <220> FEATURE: 132 <221> NAME/KEY: MISC FEATURE

134 <223> OTHER INFORMATION: Xaa at position 30 is Arg, Gly or Lys.

133 <222> LOCATION: (30)..(30)

DATE: 02/08/2007

TIME: 11:42:29

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Input Set : A:\sequence listing.txt
                     Output Set: N:\CRF4\02082007\J572348.raw
     1937 <220> FEATURE:
     138 <221> NAME/KEY: MISC FEATURE
     139 <222> LOCATION: (31)..(31)
     140 <223> OTHER INFORMATION: Xaa at position 31 is Gly, Ala, Glu, Pro, Lys, amide or is
absent
     141
     144 <220> FEATURE:
     145 <221> NAME/KEY: MISC FEATURE
     146 <222> LOCATION: (32)..(32)
     147 <223> OTHER INFORMATION: Xaa at position 32 is Lys, Ser, amide or is absent.
     150 <220> FEATURE:
     151 <221> NAME/KEY: MISC FEATURE
     152 <222> LOCATION: (33)..(33)
    153 <223> OTHER INFORMATION: Xaa at position 33 is Ser, Lys, amide or is absent.
     156 <220> FEATURE:
     157 <221> NAME/KEY: MISC FEATURE
     158 <222> LOCATION: (34)..(34)
     159 <223> OTHER INFORMATION: Xaa at position 34 is Gly, amide or is absent.
     162 <220> FEATURE:
     163 <221> NAME/KEY: MISC FEATURE
     164 <222> LOCATION: (35)..(35)
     165 <223> OTHER INFORMATION: Xaa at position 35 is Ala, amide or is absent.
     168 <220> FEATURE:
     169 <221> NAME/KEY: MISC_FEATURE
     170 <222> LOCATION: (36)..(36)
    171 <223> OTHER INFORMATION: Xaa at position 36 is Pro, amide or is absent.
     174 <220> FEATURE:
     175 <221> NAME/KEY: MISC FEATURE
     176 <222> LOCATION: (37)..(37)
     177 <223> OTHER INFORMATION: Xaa at position 37 is Pro, amide or is absent.
     180 <220> FEATURE:
     181 <221> NAME/KEY: MISC FEATURE
     182 <222> LOCATION: (38)..(38)
     183 <223> OTHER INFORMATION: Xaa at position 38 is Pro, amide or is absent.
     186 <220> FEATURE:
     187 <221> NAME/KEY: MISC FEATURE
     188 <222> LOCATION: (39)..(39)
     189 <223> OTHER INFORMATION: Xaa at position 39 is Ser, amide or is absent.
     192 <220> FEATURE:
     193 <221> NAME/KEY: MISC FEATURE
     194 <222> LOCATION: (40)..(40)
    195 <223> OTHER INFORMATION: Xaa at position 40 is amide or is absent.
    198 <400> SEQUENCE: 2
W--> 200 Xaa Xaa Glu Gly Thr Phe Thr Ser Asp Xaa Ser Xaa Xaa Xaa Glu Xaa
     201 1
                         5
                                             10
     204 Xaa Ala Xaa Xaa Xaa Phe Ile Xaa Trp Leu Xaa Xaa Xaa Xaa Xaa Xaa
    205
                     20
                                         25
    208 Xaa Xaa Xaa Xaa Xaa Xaa Xaa
```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/572,348

35 212 <210> SEQ ID NO: 3

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RAW SEQUENCE LISTING DATE: 02/08/2007 PATENT APPLICATION: US/10/572,348 TIME: 11:42:29

Input Set : A:\sequence listing.txt
Output Set: N:\CRF4\02082007\J572348.raw

213 <211> LENGTH: 32 -> Same Encr 214 <212> TYPE: PRT 215 <213> ORGANISM: (Synthetic construct 217 <220> FEATURE: 218 <221> NAME/KEY: MISC FEATURE 219 <222> LOCATION: (1)..(1) 220 <223> OTHER INFORMATION: Xaa at position 1 is L-histidine, D-histidine, desaminohistidine , 2-amino-histidine, beta-hydroxy-histidine, homohistidine, N-alp 221 222 ha-acetyl-histidine, alpha-fluoromethyl-histidine, alpha-methyl-h istidine, 3-pyridylalanine, 2-pyridylalanine, or 4-pyridylalanine 223 W--> 224 227 <220> FEATURE: 228 <221> NAME/KEY: MISC FEATURE 229 <222> LOCATION: (2)..(2) 230 <223> OTHER INFORMATION: Xaa at position 2 is Ala, Gly, Val, Leu, Ile, Lys, Aib, (1aminoc 231 yclopropyl) carboxylic acid, (1-aminocyclobutyl) carboxylic acid, 232 (1-aminocyclopentyl) carboxylic acid, (1-aminocyclohexyl) carboxy 233 lic acid, (1-aminocycloheptyl) carboxylic acid or (1-aminocyclooc W--> 234 tyl) carboxylic acid. 237 <220> FEATURE: 238 <221> NAME/KEY: MISC FEATURE 239 <222> LOCATION: (12)..(12) 240 <223> OTHER INFORMATION: Xaa at position 12 is Ser, Lys or Arg. 243 <220> FEATURE: 244 <221> NAME/KEY: MISC FEATURE 245 <222> LOCATION: (16)..(16) 246 <223> OTHER INFORMATION: Xaa at position 16 is Gly, Glu or Aib. 249 <220> FEATURE: 250 <221> NAME/KEY: MISC FEATURE 251 <222> LOCATION: (17)..(17) 252 <223> OTHER INFORMATION: Xaa at position 17 is Gln, Gly, Lys or Arq. 255 <220> FEATURE: 256 <221> NAME/KEY: MISC FEATURE 257 <222> LOCATION: (20)..(20) 258 <223> OTHER INFORMATION: Xaa at position 20 is Lys, Glu or Arg. 261 <220> FEATURE: 262 <221> NAME/KEY: MISC FEATURE 263 <222> LOCATION: (24)..(24) 264 <223> OTHER INFORMATION: Xaa at position 24 is Ala, Glu or Arg. 267 <220> FEATURE: 268 <221> NAME/KEY: MISC FEATURE 269 <222> LOCATION: (28)..(28) 270 <223> OTHER INFORMATION: Xaa at position 28 is Lys, Glu or Arg. 273 <220> FEATURE: 274 <221> NAME/KEY: MISC FEATURE 275 <222> LOCATION: (29)..(29) 276 <223> OTHER INFORMATION: Xaa at position 29 is Gly or Aib. 279 <220> FEATURE: 280 <221> NAME/KEY: MISC FEATURE

DATE: 02/08/2007

TIME: 11:42:29

Input Set : A:\sequence listing.txt Output Set: N:\CRF4\02082007\J572348.raw 281 <222> LOCATION: (30)..(30) 282 <223> OTHER INFORMATION: Xaa at position 30 is Arg or Lys... 285 <220> FEATURE: 286 <221> NAME/KEY: MISC_FEATURE 287 <222> LOCATION: (31)..(31) 288 <223> OTHER INFORMATION: Xaa at position 31 is Gly, Ala, Glu or Lys. 291 <220> FEATURE: 292 <221> NAME/KEY: MISC_FEATURE 293 <222> LOCATION: (32)..(32) 294 <223> OTHER INFORMATION: Xaa at position 32 is Lys, amide or is absent. 297 <400> SEQUENCE: 3 -> 299 Xaa Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Xaa Tyr Leu Glu Xaa 5 10 303 Xaa Ala Ala Xaa Glu Phe Ile Xaa Trp Leu Val Xaa Xaa Xaa Xaa Xaa 304 20 25 307 <210> SEQ ID NO: 4 308 <211> LENGTH: 39 309 <212> TYPE: PRT 310 <213> ORGANISM: Gila monster 312 <220> FEATURE: 313 <221> NAME/KEY: MISC FEATURE 314 <222> LOCATION: (39)..(39) 315 <223> OTHER INFORMATION: Amidation of carboxy group. 318 <400> SEQUENCE: 4 320 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu 321 1 5 10 324 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser 20 328 Ser Gly Ala Pro Pro Pro Ser 329 35 332 <210> SEQ ID NO: 5 333 <211> LENGTH: 44 Same Eercr 334 <212> TYPE: PRT 335 <213> ORGANISM: Eynthetic construct 337 <220> FEATURE: 338 <221> NAME/KEY: MISC FEATURE 339 <222> LOCATION: (44)..(44) 340 <223> OTHER INFORMATION: Amidation of carboxy group. 343 <400> SEQUENCE: 5 345 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu 346 1 5 10 349 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser . 353 Ser Gly Ala Pro Pro Ser Lys Lys Lys Lys Lys

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/572,348

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RAW SEQUENCE LISTING ERROR SUMMARY DATE: 02/08/2007 PATENT APPLICATION: US/10/572,348 TIME: 11:42:30

Input Set : A:\sequence listing.txt
Output Set: N:\CRF4\02082007\J572348.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:2; Xaa Pos. 1,2,10,12,13,14,16,17,19,20,21,24,27,28,29,30,31,32,33,34

Seq#:2; Xaa Pos. 35,36,37,38,39,40 Seq#:3; Xaa Pos. 1,2,12,16,17,20,24,28,29,30,31,32 VERIFICATION SUMMARY

PATENT APPLICATION: US/10/572,348

DATE: 02/08/2007 TIME: 11:42:30

Input Set : A:\sequence listing.txt
Output Set: N:\CRF4\02082007\J572348.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No

L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:40 M:259 W: Allowed number of lines exceeded, <223> Other Information: L:50 M:259 W: Allowed number of lines exceeded, <223> Other Information:

L:200 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0

M:341 Repeated in SeqNo=2

L:224 M:259 W: Allowed number of lines exceeded, <223> Other Information: L:234 M:259 W: Allowed number of lines exceeded, <223> Other Information:

L:299 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0

M:341 Repeated in SeqNo=3